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Researchers have found that self-concept in students fluctuates during times of change, such as the physical transition between elementary school and junior high. Since Catholic school students typically do not have the physical transition or social network changes in junior high, it was hypothesized that their self-concepts would not fluctuate. One hundred ninety-five ethnically diverse Catholic school students rated how they think and feel about their general, self-image, academic, and social self-concepts, as well as how important each item was to their self-concept. Students were initially in fourth, fifth, and sixth grade and subsequently in sixth, seventh, and eighth grade at the time of the longitudinal study. Overall, the results indicated that ratings of self-concept and the importance of the items remained stable between elementary and junior high school and for students of varying ethnicities. The results are compared to the findings from other studies. The lack of a physical transition and social network changes from elementary school to junior high may assist students from developing significantly lower self-concept in junior high, especially in academic and social self-concept.

Educational, developmental, and social psychologists have been interested in self-concept over the last 5 decades. Researchers have found that self-concept is relatively and possibly increasingly stable, but fluctuates during times of change, such as the transition between elementary and junior high school and between junior high and high school (Harter, 2006). Few studies have examined the importance students place on the self-concept domains and ethnic differences in self-concept amongst elementary or junior high students. Therefore, the purpose of this study is to examine if self-concept and the importance students place on domains of self-concept change in Catholic school children who do not have to make a physical transition to junior high and to examine if there are differences in self-concept as reported

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by students of varying ethnicities.

Self-Concept Definition and Theories

Self-concept is defined generally as the way in which one perceives and evaluates oneself in specific domains (Byrne, 1984; Harter, 1999, 2006; Hattie, 1992; Marsh & Shavelson, 1985). Self-concept is shaped by others and the environment and reciprocally influences how one perceives the self, others, and the environment (Hattie, 1992). The domains of self-concept are often differentiated from global self-worth, self-esteem, and general self-concept, all of which refer to the evaluation of one's worth as a person (Harter, 2006).

Self-concept has been theorized to be hierarchical and multidimensional and may include academic, social, and other domains such as self-image (Marsh & Shavelson, 1985). Byrne (1996) identifies seven theoretical models of self-concept that fall into two broad categories: unidimensional and multidimensional models. The two unidimensional models acknowledge self-concept as a general concept, much like self-esteem, and do not acknowledge the domains of self-concept. Although there is little empirical support for these views, these two models continue to be validated due to their parsimony and historical predominance. The most researched model in the multidimensional category is the hierarchical model, largely based on the work of Shavelson and his colleagues (Shavelson, Hubner, & Stanton, 1976). In this model, global or general self-concept is at the apex of the model. As one moves from the top to the bottom of the model, self-concept becomes increasingly differentiated. The hierarchical model also proposes that global self-concept is divided into two branches: academic and non-academic self-concept. This model has undergone extensive construct validation, mostly related to the academic branch of the model (Byrne & Shavelson, 1986; Marsh, 2008; Marsh, Byrne, & Shavelson, 1988; Marsh & Shavelson, 1985). The self-concept measure used in this study is based on Shavelson et al.'s model.

Domains of Self-Concept

Researchers have proposed many domains of self-concept (Bracken, Bunch, Keith, & Keith, 2000; Harter, 1999; Marsh, 1990). Only the domains used in this study are discussed below. Briefly, self-image self-concept addresses an individual's general "perceptions about culturally valued behaviors or personal attributes such as self-worth, popularity, physical attractiveness or physical skill"

(Gresham, 1995, p. 20). Academic self-concept has been defined as how the individual feels about his or her ability to perform academic behaviors (Gresham, 1995; Gresham, Elliott, & Evans-Fernandez, 1993). Of the three domains of self-concept discussed here, academic self-concept is the most researched (Guay, Marsh, & Boivin, 2003; Marsh, 1986; Marsh, 1992). Social self-concept focuses on the social domain and taps into the individual's comfort in social interactions (Gresham, 1995; Gresham et al., 1993).

Self-Concept and Transitions

Shavelson and colleagues (1976) theorized that self-concept becomes increasingly stable throughout the life span. Wylie (1979), in a review of the literature, concluded that there was no evidence that there is an age effect on self-concept between the ages of 6 and 50. Subsequent studies have found that self-concept is relatively and possibly increasingly stable, but fluctuates during times of change, such as the transition between elementary school and junior high and between junior high and high school (Cole, et al., 2001; Harter, 2006). Marsh (1989), based on his results with Australian students, found that there is a curvilinear effect of age or U-shaped pattern, with domains of self-concept declining during preadolescence and early adolescence, plateauing in middle adolescence, and increasing in late adolescence and early adulthood. De Fraine, Van Damme, and Onghena (2007) found that academic self-concept in Flemish students declines at the beginning of secondary school and continues to decline during secondary school. Wigfield and colleagues (Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991) found that public school students' rating of their social ability was significantly lower at the beginning of junior high and increased by the end of the school year. However, social ratings were significantly higher at the end of the year prior to the start of junior high than they were at the end of the first year of junior high. These results indicate that one's perception of one's social ability may have a curvilinear effect such that it is lower in junior high than in elementary school and then increases throughout junior high. Harter (2006) also notes that there is a decline in self-concept during the transition to junior high. She indicates that there are differences between elementary and junior high school with students in junior high being more concerned about peers and social networks and teachers having higher or different expectations. Each of these factors may impact self-concept. Additionally, Harter notes that changes related to puberty may also impact self-concept during this transition period. Because Catholic elementary schools

typically contain kindergarten through eighth grade, students do not experience a physical transition to a new campus and should not experience a disruption in their social networks upon the transition to junior high. Since there are fewer differences between elementary school and junior high at a K-8 school, it is hypothesized that self-concepts should remain stable.

Gender and Self-Concept

Many researchers have found that there are no gender differences in self-concept, especially when using general self-concept as the measure of interest (Hirsh & Rapkin, 1987; Piers & Harris, 1964; Wylie, 1979). Other researchers have found that there are gender differences (Bledsoe, 1964; Block & Robins, 1993; Skaalvik & Rankin, 1990) and those differences tend to favor stereotypical sex roles (Harter, 2006; Marsh, 1989). Cole et al. (2001) found that academic and sports self-concept significantly dropped between sixth and seventh grade during the transition to middle school. Males perceived themselves as better athletes and better looking and females considered themselves better behaved. Males also regarded themselves as better academically. The authors caution that this last finding was unexpected and needs replication before further interpretations are made. Given that multiple domains are examined in the current study, it is important to consider gender as a variable when examining the specific domains of self-concept.

Ethnicity and Self-Concept

Most of the studies on ethnic differences have compared White and Black students (Harter, 2006; Wylie, 1979). Additionally, much of the research on ethnic differences has examined self-esteem as the construct of interest rather than the domains of self-concept. In a meta-analysis of race and self-esteem, Twenge and Crocker (2002) found that Blacks score higher than Whites and Whites score higher than other racial groups (Hispanic, Asian, and Native American) on measures of self-esteem. House (1997) found that Asian-American college freshmen with higher achievement expectancy also had higher academic self-concept, financial goals, social goals, and desire for recognition, and took more units of academic study in high school. House notes that this finding is similar to findings of previous research. Given that few studies have explored ethnic differences in self-concept of elementary school children, especially in a longitudinal study, it is important to consider ethnicity as a vari-

able when examining the specific domains of self-concept.

Importance Ratings and Self-Concept

The significance of an importance rating in self-concept has been debated. Conceptually and theoretically most researchers, dating back to James (1890/1963), agree that the greater the discrepancy between how important a domain of self-concept is to an individual and the individual's self-concept in that domain, the lower the general self-concept or self-esteem should be (Harter, 1999; Marsh, 2008). Byrne (1996) indicates that models of self-concept should include an importance or salience construct because individuals may value specific domains of self-concept differently. Therefore, the importance one places on a domain of self-concept may directly influence how the individual rates oneself in that domain, acting like a moderating variable. For example, for domains considered unimportant, whether or not individuals perceive themselves to be competent in that domain is irrelevant. Conversely, if the student highly values a specific domain in which he or she feels less confident, the student's general self-concept or confidence may be negatively impacted. However, Marsh (2008) indicates that there has not been empirical evidence to support the use of the importance ratings, but that this theory may apply to a few specific domains of self-concept or subgroups of individuals. Given that Catholic school children may be considered a subgroup, an analysis of importance ratings is justified. However, importance ratings may not be as stable because the importance individuals place on certain domains changes over time (Harter, 1999).

Overview of Present Research. In summary, this study is unique because it examines the stability of self-concept for the time interval between elementary school and junior high school specifically for students in Catholic schools that contain students from kindergarten through eighth grade. There have been few longitudinal studies of the effects of Catholic education (Frabutt, Nuzzi, Hunt, & Solic, 2008) and even fewer studies that begin when the students are in elementary school. Most of the longitudinal studies have been national studies and have focused on outcomes in and after high school. New knowledge may be gained by exploring what students are thinking and feeling about themselves as they attend Catholic elementary schools. Additionally, few studies have addressed ethnic differences on the specific domains of self-concept at the elementary or junior high level. Finally, the stability of the

importance that students place on the domains of self-concept has not been studied in Catholic school children. Therefore, the purpose of this study is twofold: (a) to determine if self-concept, using the self-confidence composite/general self-concept as well as self-image, academic, and social self-concept domains, changes in the 2-year period spanning late elementary and junior high school for the different grade cohorts (fourth to sixth grade, fifth to seventh grade, and sixth to eighth grade), for boys and girls, or for students of differing ethnicities attending Catholic schools; and (b) to determine if the importance Catholic school students place on the domains of self-concept (self-image, academic, and social) changes in the 2-year period spanning late elementary and junior high school for the different grade cohorts, for boys and girls, or for students of differing ethnicities.

Method

Participants

Data for this study were collected 2 years apart and were part of a larger longitudinal study. Participants had to participate at both time periods. The Catholic schools asked to participate were chosen in consultation with the superintendent, were within the same geographic area, represented the ethnic diversity of the region, and had teachers who participated in regular cross-school collaborative meetings to share ideas and problem solve. Schools were organized similarly, such that students transitioned to junior high in sixth grade. At all of the schools, junior high students remained at the same school site and had a homeroom teacher. All schools tried to simulate the public school junior high experience of multiple teachers by having teachers teach one or two subjects to all the junior high students. For example, the sixth grade teacher taught English, the seventh grade teacher taught mathematics, and the eighth grade teacher taught religion to all sixth, seventh, and eighth graders. For demographic information and participation rates by school, see Table 1. At both times, schools with higher levels of free and reduced-lunch rates had lower participation rates.

At Time I, all students in fourth, fifth, and sixth grade attending one of seven parochial schools in Northern California were asked to participate. Of the 632 students, 331 students participated in the study. At Time 2, all sixth, seventh, and eighth grade students from the same seven schools were asked to participate in a second study. Of the 646 students, 348 students participated in the study. See Table 2 for the participation rate by grade level and the percentage of students in each cohort in the final sample.

Table 1

Gender, Ethnicity, and Free and Reduced-Lunch Percentage Rates as Reported by the Schools and Participation Rates By School (Percent)

School	Male	Female	White	Black	Asian	Hispanic	Other	F&R Lunch	Time 1	Time 2
School 1	53	57	24	3	41	12	20	12	61	66
School 2	50	50	45	3	36	12	4	5	68	73
School 3	49	51	28	34	17	13	8	7	55	61
School 4	*	*	*	*	*	*	*	*	53	52
School 5	49	51	1	35	9	55	1	62	49	48
School 6	50**	50**	20**	40**	0**	40**	0**	85**	13	33
School 7	48	52	24	20	14	22	19	7	39	36
Total	49	51	24	16	26	27	7	30	52	54

Note. *school did not provide information; **school provided estimates

Table 2

Participation Percentage Rates at Time 1 and Time 2 and Percentage of Students in Each Cohort in the Final Sample

Cohort	Time 1 (n = 331)	Time 2 (n = 348)	Final Sample (n = 193)
4th/6th	48	51	25.7
5th/7th	53	54	32.8
6th/8th	56	57	41.5
Overall	52	54	

The final sample, those students who participated at Time 1 and Time 2, consisted of 195 students. Two students were dropped from the study because they were of an ethnic group that did not have a large enough sample to analyze (i.e., of Middle Eastern descent). Of the 331 students who participated at Time 1, 58.9% also participated at Time 2. The 41.1% attrition rate was due to students not participating at Time 2 or no longer attending one of the seven schools in the study. Students who transferred between one of the seven participating schools were included in the final sample (n = 7). See Table 3 for gender and ethnicity as reported by the students in the final sample. As compared to the schools' records of ethnicity, this sample is slightly over-representative of White and Asian students, slightly underrepresentative of Black students, and representative of Hispanic students. At Time 2, no students from Time 1

participated from School 6. That school also had the highest free and reduced-lunch rate and the lowest participation rate during Time 1. It is possible that the principal and sixth grade teacher's interest in the study is related to the low return rate, as the return rate increased at Time 2 (from 13% to 33%) and there had been a change in principal and sixth grade teacher.

Table 3

Gender and Ethnicity as Reported by Students in the Study (Percent)

School	Male	Female	White	Black	Asian	Hispanic
School 1 (n = 32)	38	62	38	0	47	16
School 2 (n = 61)	50	50	38	0	41	21
School 3 (n = 27)	38	62	53	18	18	11
School 4 (n = 13)	37	63	7	4	37	52
School 5 (n = 13)	46	54	15	23	0	62
School 6 (n = 0)	0	0	0	0	0	0
School 7 (n = 26)	31	69	38	12	15	35
Totals (n = 193)	40	60	34	7	31	27

Instrumentation

Student Self-Concept Scale. The Student Self-Concept Scale (SSCS; Gresham et al., 1993) was designed as a screening measure and research tool for children and adolescents in grades 3 through 12. This measure is based on several theories, including Shavelson et al.'s theory (1976) that self-concept is hierarchical and Eccles et al.'s theory (1983, as cited in Gresham et al., 1993) that tasks have a subjective task value or that an importance value can be given to an item. Two equivalent forms are available based on grade level. Level I is intended for students in grades 3 through 6 and Level II is intended for students in grades 7 through 12. At Time 1 all participants completed Level I. At Time 2 the sixth grade students completed Level I and the seventh and eighth grade students completed Level II. Both levels contain the same number of items. Separate norms are provided for boys and girls for each level because

when the specific domains of self-concept were examined, there were gender and grade level differences within the standardization sample. Students' raw and standard scores for the SSCS subscales and composites were computed using the scoring guides provided in the SSCS manual. Each standard score for the composites and scales has a mean of 100 and a standard deviation of 15.

Both levels consist of a 72-item scale that measures self-concept in three content domains: self-image, academic, and social self-concept. For the first 57 items, students rate their self-confidence (self-concept) in either performing the behaviors or having the attributes mentioned on a 3-point Likert scale and then they also rate how important these same 57 items are to their self-confidence on a 3-point Likert scale. Twelve items are related to the self-image content domain, 18 items are related to the academic content domain, and 20 items are related to the social domain. Seven items are part of the Lie Scale, which identifies unrealistically high levels of social desirability. Fifteen items measure outcome expectations or the degree of confidence the students have that performing a certain action or having a certain attribute will lead to a certain outcome. These items are stated as "If… then…" statements. These outcome items were not included in the analyses because they are unique to this measure and not typically found in self-concept measures. Therefore, these items and scales will not be discussed in detail. From the SSCS two composite scores can be obtained: the self-confidence composite, which consists of the self-confidence or self-concept rating from the self-image, academic, and social subscales; and the outcome confidence composite. The SSCS does not provide a composite score for the importance ratings; however, there are ratings for the self-image importance, academic importance, and social importance subscales. Both Level I and Level II were found to be reliable and valid measures of self-concept (Gresham et al., 1993).

Demographic information form. Students were asked to complete a form that contained their date of birth, age, grade level, gender, and ethnicity. It should be noted that students identified their ethnicity at both Time 1 and Time 2 of the study. Although most students were consistent in their report, there were changes in identification between Time 1 and Time 2. Therefore, there are likely students of mixed heritage in this sample.

Procedure

At Time 1 and Time 2 permission was obtained from the superintendent of

the diocesan schools and seven principals allowed their schools to participate in both Time 1 and Time 2. Information about the study was provided to all parents of students in the fourth, fifth, and sixth grades (Time 1) or the sixth, seventh, and eighth grades (Time 2) and parents were asked to give written consent for their child to participate. Before completing the questionnaires, students were asked to provide written assent. Students who provided written assent and whose parents provided written consent were asked to complete the SSCS and the demographic information sheet in their classroom or other designated area at the school. Students silently read each questionnaire and circled the choice that best described themselves. Any questions about the items were answered by the primary author. At the end of the session the students and teacher were thanked for their participation.

Statistical Analysis

Descriptive Statistics. Nonparametric tests were conducted to compare the students who continued in the study at Time 2 to the students who did not participate in the study at Time 2. Binomial tests were conducted to assess if there were gender differences. There were no significant gender differences in the sample at Time 1, nor were there differences for those that participated or did not participate in the study at Time 2. However, in the final sample, there were significantly more females than males (two-tailed, $p = .03$).

Chi-square tests were conducted to assess if there were grade cohort or ethnic differences in the final sample. There were no significant differences in the number of students in each cohort who participated at Time 2, did not participate at Time 2, or in the final sample. As compared to the school reports of ethnicity at Time 1, there were significantly fewer Black students in the sample than expected, χ^2 (3, $N = 327$) = 9.66, $p = .02$; in the final sample there were fewer Black students and more White students than expected, χ^2 (3, $N = 192$) = 15.16, $p = .002$. However, attrition was not related to ethnicity, as the proportion of students of each ethnicity that did not participate in the study at Time 2 was not significant.

A series of one-way analysis of variance (ANOVA) were conducted to compare the Time 1 self-concept scores of the students who did not participate in the study at Time 2 to the students who participated in the study at Time 1 and Time 2. None of the ANOVAs were significant, indicating that participation in the longitudinal study was not dependent on a student's self-concept.

A multicohort-multioccasion design that measured multiple domains of

self-concept was used, as Marsh, Craven, and Debus (1998) have argued that this is the appropriate design to examine age-related changes in self-concept. Preliminary analyses were conducted to examine the data and check for violations of the ANOVA assumptions. Correlations were examined between each self-concept variable (see Table 4) and each importance variable (see Table 5). Means and standard deviations for the overall sample, gender, grade cohort, and ethnicity were examined (see Tables 6, 7, and 8). Among the overall sample, each dependent variable (general, self-image, academic, social self-confidence/self-concept or importance) was normally distributed, with the exception of the academic self-confidence and academic importance scores, which were slightly skewed such that students tended to rate themselves higher than average on these scales.

Table 4

Correlations between Self-Concept Variables at Time 1 and Time 2 (N = 193)

	Time 1				Time 2			
Self-Concept Variable	1	2	3	4	5	6	7	8
Self-Confidence Composite (1)		.76**	.82**	.87**	.22**	.37**	.36**	.40**
Self-Image Self-Confidence (2)			.38**	.52**	.32**	.38**	.15*	.24**
Academic Self-Confidence (3)				.59**	.37**	.08	.50**	.31**
Social Self-Confidence (4)					.27**	.10	.22**	.35**
Self-Confidence Composite (5)						.76**	.78**	.83**
Self-Image Self-Confidence (6)							.29**	.47**
Academic Self-Confidence (7)								.56**
Social Self-Confidence (8)								

Note. $^{*}p \leq .05$, $^{**}p \leq .01$

Table 5

Correlations between Importance Variables at Time 1 and Time 2

	Time 1			Time 2		
Importance Variable	1	2	3	4	5	6
Self-Image Importance (1)		.28**	.52**	.24**	.02	.12
Academic Importance (2)			.59**	-.12	.33**	.16*
Social Importance (3)				.02	.15*	.29**
Self-Image Importance (4)					.32**	.40**
Academic Importance (5)						.67**
Social Importance (6)						

Note. $*p \leq .05$, $**p \leq .01$

Table 6

Means and Standard Deviations of Self-Concept Variables by Gender

	Overall (n = 193)		Males (n = 80)		Females (n = 113)	
Self-Concept Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*
Time 1						
Self-Confidence Composite	102.27	14.27	102.57	13.34	102.05	14.96
Self-Image Self-Confidence	102.81	14.02	101.04	14.78	104.07	13.37
Academic Self-Confidence	102.22	15.85	105.02	13.63	100.23	17.04
Social Self-Confidence	100.55	14.02	100.19	13.44	100.81	14.48
Self-Image Importance	100.27*	14.78	100.00	14.32	100.46**	15.17
Academic Importance	103.19***	14.70	105.28****	15.88	101.71**	13.68
Social Importance	103.08	13.60	105.41	12.95	101.42	13.86
Time 2						
Self-Confidence Composite	99.33	13.13	100.25	14.51	98.67	12.08
Self-Image Self-Confidence	98.48	15.21	98.18	16.67	98.69	14.17
Academic Self-Confidence	99.86	14.64	101.26	15.98	98.87	13.60
Social Self-Confidence	99.96	12.35	101.06	12.97	99.18	11.90
Self-Image Importance	98.34	14.11	96.66	13.37	99.52	14.56
Academic Importance	103.99	15.53	102.96	15.65	104.72	15.47
Social Importance	102.44	13.97	103.43	14.49	101.73	13.61

Note. $*n = 192$; $**n = 112$; $***n = 191$; $****n = 79$

Table 7

Means and Standard Deviations of Self-Concept Variables by Grade Level

	4th/6th Grade (n = 50)		5th/7th Grade (n = 64)		6th/8th Grade (n = 79)	
Self-Concept Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*
Time 1						
Self-Confidence Composite	102.78	14.56	102.84	14.39	101.48	14.16
Self-Image Self-Confidence	102.22	13.73	102.91	12.55	103.11	15.42
Academic Self-Confidence	103.42	17.31	102.89	15.57	100.91	15.22
Social Self-Confidence	101.16	13.62	101.23	15.20	99.62	13.39
Self-Image Importance	98.36	15.90	99.88	14.56	101.82*	14.23
Academic Importance	104.35**	14.70	101.84***	15.77	103.54	13.89
Social Importance	104.50	14.59	101.83	14.12	103.19	12.57
Time 2						
Self-Confidence Composite	102.58	15.26	98.42	12.76	98.00	11.72
Self-Image Self-Confidence	100.62	17.75	97.39	14.00	98.00	14.46
Academic Self-Confidence	102.64	16.11	99.36	15.69	98.51	12.60
Social Self-Confidence	103.34	13.32	99.31	12.17	98.34	11.58
Self-Image Importance	98.28	12.67	100.06	15.30	96.97	14.00
Academic Importance	103.10	16.60	107.17	15.67	101.97	14.48
Social Importance	104.54	12.85	102.61	15.44	100.96	13.38

Note. *n = 78; **n = 49; ***n = 63

Table 8

Means and Standard Deviations of Self-Concept Variables by Ethnicity

	White (n = 67)		Black (n = 13)		Asian (n = 60)		Hispanic (n = 53)	
Self-Concept Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Time 1								
Self-Confidence Composite	104.09	12.21	104.00	13.19	101.18	14.98	100.77	16.13
Self-Image Self-Confidence	104.31	13.03	103.62	10.28	100.15	14.54	103.74	15.28
Academic Self-Confidence	103.91	15.48	106.08	12.69	103.42	14.81	97.77	17.56
Social Self-Confidence	101.81	12.63	100.23	16.07	99.37	13.94	100.40	15.48
Self-Image Importance	100.36	15.22	94.62	12.71	99.27	14.76	102.73*	14.57
Academic Importance	102.25**	15.41	106.31	9.60	102.88	15.51	103.92	14.09
Social Importance	103.88	12.61	95.77	11.65	101.95	14.66	105.13	13.64
Time 2								
Self-Confidence Composite	100.99	13.58	104.92	14.84	97.93	13.13	97.43	11.79
Self-Image Self-Confidence	99.63	14.94	100.46	17.25	98.32	16.15	96.72	14.17
Academic Self-Confidence	101.51	15.49	106.38	14.76	98.70	15.17	97.49	12.42
Social Self-Confidence	101.36	12.90	105.62	11.83	97.77	11.50	99.28	12.37
Self-Image Importance	97.52	13.01	96.08	12.96	99.88	15.36	98.17	14.48
Academic Importance	102.75	15.84	111.00	15.36	102.95	15.36	105.02	15.28
Social Importance	102.15	14.10	100.15	15.09	102.13	13.95	103.70	13.85

Note. *n = 52; **n = 65

Analyses for the self-confidence and importance questions. A factorial ANOVA was conducted for each of the four self-confidence scales (composite, self-image, academic, and social) and each of the three importance scales (self-image, academic, and social). For each ANOVA the self-concept or importance standard score was the dependent variable (composite, self-image, academic, or social). In each ANOVA there was one within-subjects factor (time) and three between-subjects factors: grade cohort (fourth/sixth, fifth/seventh, and sixth/eighth), gender, and ethnicity (White, Black, Asian, and Hispanic). Interactions were evaluated and follow-up tests proceeded according to the results. If no interactions were present, then main effects were evaluated, with follow-up pairwise comparisons proceeding according to the results. The ANOVAs for each question were considered a "family" and family-wise Type I error was controlled for using the Bonferroni correction method, such that for the self-confidence question $\alpha = 0.05/4 = 0.0125$ and for the importance question $\alpha = 0.05/3 = 0.017$. In all analyses, partial η^2 effect sizes were computed along with significance tests.

Results

Of the 195 students who participated at Time 1 and Time 2 of the study, 193 students completed the questionnaires and belonged to an ethnic group that had a large enough sample size to analyze at Time 2. Three students were dropped from analyses because they did not complete enough of the questionnaire to obtain a subscale score.

Self-Confidence (Self-Concept) Question

Results of the repeated-measures ANOVAs conducted on the self-confidence composite and the self-image, academic, and social self-confidence scales indicated no significant interactions involving the within-subjects effect of time and no significant main effect for time across Time 1 and Time 2, $F(1, 170) = 1.32$, $p = 0.25$, partial $\eta^2 = 0.008$; $F(1, 170) = 5.53$, $p = 0.02$, partial $\eta^2 = 0.03$; $F(1, 170) = 0.72$, $p = 0.40$, partial $\eta^2 = 0.004$; $F(1, 170) = 0.403$, $p = 0.53$, partial $\eta^2 = 0.002$, respectively. These results indicate that general self-concept, self-image self-concept, academic self-concept, and social self-concept remained stable across the 2-year time period.

Additionally, no interactions or main effects were significant for the between-subjects factors, indicating that there was no significant difference in general self-concept, self-image self-concept, or social self-concept between gender, grade cohort, and ethnicity. For self-image self-confidence, the grade

by ethnicity interaction, F (6, 170) = 2.45, p = 0.027, partial η^2 = 0.08, and the main effect of ethnicity, F (3, 170) = 2.88, p = 0.038, partial η^2 = 0.05, were not significant after applying the Bonferroni correction procedure to control for Type I error. Because no significant interactions or main effects were found, no follow-up tests were conducted for the general self-confidence composite and the self-image and social self-confidence scales.

However, for academic self-confidence, there was a significant gender by grade cohort interaction, F (2, 170) = 4.94, p = 0.008, partial η^2 = 0.055. Follow-up independent sample t-tests (such that academic self-confidence at Time 1 and Time 2 were averaged) were conducted to examine the gender within grade and the grade within gender simple main effects. The pattern of mean scores across gender differed by grade. The only difference found to be significant was between male students in the fourth/sixth-grade cohort and male students in the sixth/eighth-grade cohort, t (47) = 3.21, p = .002, such that males in the fourth/sixth-grade cohort (M = 108.72, SD = 12.10) had higher academic self-concept than males in the sixth/eighth-grade cohort (M = 97.25, SD = 12.83). The mean difference between males and females in the sixth/eighth-grade cohort was not significant after applying the Bonferroni correction procedure to control for Type I error, t (48) = 2.67, p = .01. An examination of Figures 1 and 2 reveals that although there may have been a significant interaction, standard scores for both groups are within the average range (85-115). Thus, the mean score for males, females, and students of differing grade cohorts were within the average range. Therefore, there was no meaningful change in students' academic self-concept for males and females, but males in the younger fourth/sixth-grade cohort had higher academic self-concept than males in the sixth/eighth-grade cohort.

Importance Question

Results of the repeated-measures ANOVA conducted on the self-image and academic importance scores found no significant interactions involving the within-subjects effect of time and no significant main effect for time across Time 1 and Time 2, F (1, 170) = 1.91, p = 0.168, partial η^2 = 0.011 and F (1, 168) = 0.662, p = 0.417, partial η^2 = 0.004, respectively. These results indicate that there was no significant change in students' rating of the importance they place on their self-image and academics between Time 1 and Time 2. Additionally, no interactions or main effects were significant for the between-subjects factors. The gender by grade cohort interaction for academic importance was not

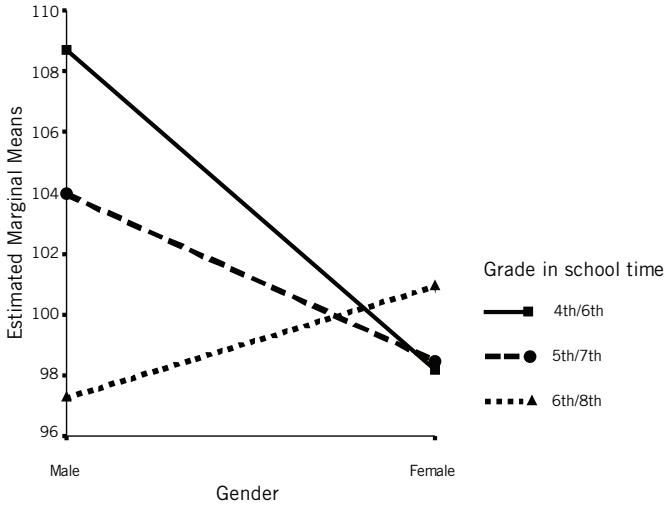

Figure 1. Graphic representation of the grade within gender simple main effects for academic self-confidence.

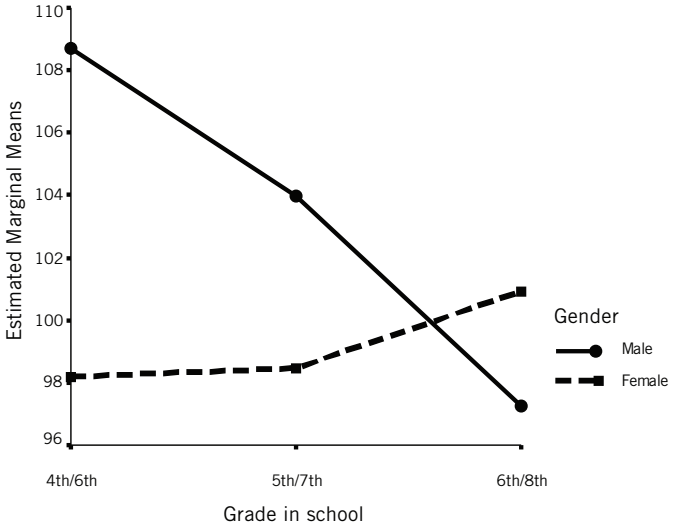

Figure 2. Graphic representation of the gender within grade simple main effects for academic self-confidence.

significant after applying the Bonferroni correction procedure to control for Type I error, F (2, 168) = 3.67, p = 0.028, partial η^2 = 0.042. Therefore, there was no significant difference in the importance students place on their self-image and academics between gender, grade cohort, and ethnicity. Because no significant interactions or main effects were found, no follow-up tests were conducted.

Results of the repeated-measures ANOVA conducted on the social importance standard score, however, indicate there was a time by gender by ethnicity interaction, F (1, 170) = 3.56, p = 0.016, partial η^2 = 0.059. Two follow-up ANOVAs were conducted. Simple gender by ethnicity ANOVAs were conducted on the social importance scores within each time. No interactions or main effects were significant when social importance at Time 1 was the dependent variable (see Figures 3 and 4). No interactions or main effects were significant when social importance at Time 2 was the dependent variable (see Figures 5 and 6). Additionally, no interactions or main effects were significant for the between-subjects factors. The grade cohort by ethnicity interaction was not significant after applying the Bonferroni correction procedure to control for Type I error, F(1, 170) = 2.317, p = 0.035, partial η^2 = 0.076. Because no significant interactions or main effects were found for the between-subjects effects, no follow-up tests were conducted.

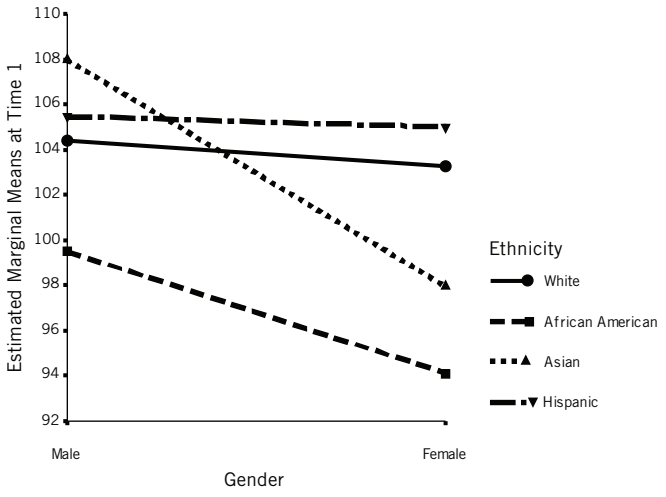

Figure 3. Graphic representation of gender by ethnicity interaction at Time 1 for social importance.

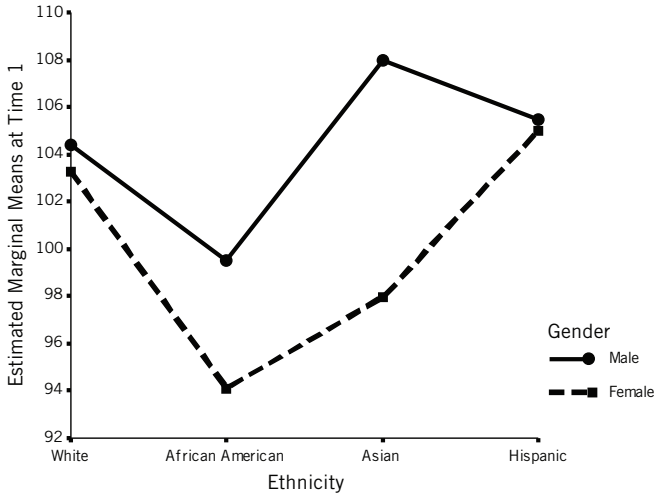

Figure 4. Graphic representation of gender by ethnicity interaction at Time 1 for social importance.

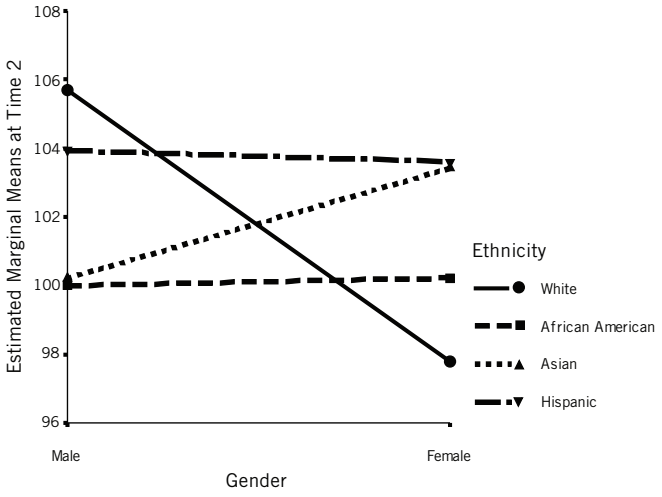

Figure 5. Graphic representation of gender by ethnicity interaction at Time 2 for social importance.

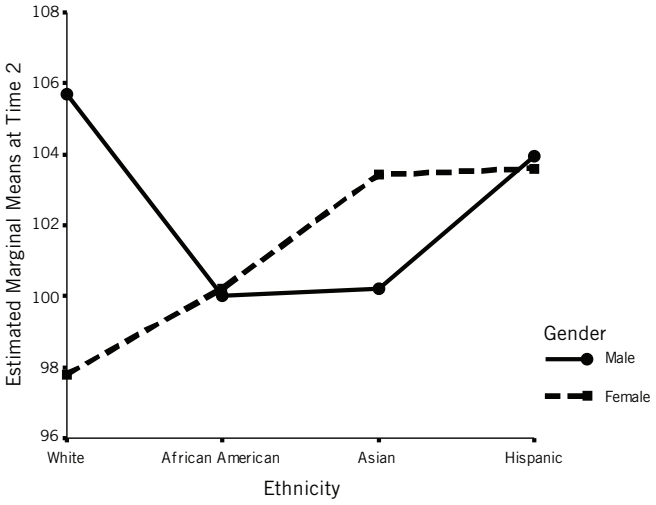

Figure 6. Graphic representation of gender by ethnicity interaction at Time 2 for social importance.

Discussion

This study examined two broad questions related to the stability of self-concept and the importance of self-concept domains across a 2-year period for students in late elementary and junior high school attending Catholic schools. The first question examined the stability of general self-concept, self-image self-concept, academic self-concept, and social self-concept across the 2-year period at each grade cohort, for gender and for ethnicity. Overall, general self-concept as well as the specific domains related to self-image, academic, and social self-concept were stable across the 2-year period for each grade level, for males and females, and for each ethnic group. The second question examined the stability of students' ratings of the importance of self-concept domains, self-image importance, academic importance, and social importance across the 2-year period at each grade cohort, for gender, and for ethnicity. Overall, the importance students placed on the self-image, academic, and social domains were found to be stable across the 2-year period for each grade level, for males and females, and for each ethnic group. Overall, no significant effects were found for gender, grade cohort, or ethnicity for general self-concept, the domains of self-concept, or the importance of the domains of self-concept, with the exception of academic self-concept. The stability of self-concept between elementary school and junior high school for this group of Catholic school children is discussed beginning with general self-concept followed by a discus-

sion of each domain: self-image, academic, and social self-concept.

General Self-Concept

Our results indicated that although the students' scores on the general self-concept composite were lower at Time 2, there was no significant difference in general self-concept across time, indicating that general self-concept remained stable over time, despite the transition to junior high. Because general or global self-concept is a measure of the combined domains of self-concept, it most closely resembles self-esteem. Coleman, Hoffer, and Kilgore (1982) found that Catholic school children had higher self-esteem than their public school counterparts. However, according to Tevendale and Dubois (2006), more recent researchers agree that self-esteem increases across childhood, plateaus by late childhood at a lower level, and declines during early adolescence and then increases again across adolescence.

The use of general self-concept measures or self-esteem measures has been popular in evaluating interventions in schools. Although the use of self-esteem scales to measure changes in self-esteem after applying an intervention has been quite prevalent, Marsh, Craven, and Martin (2006) argue for the use of self-concept domains, especially in interventions, because the domains of self-concept are more focused and more likely to detect change than a global measure. Thus, we turn to the specific domains of self-concept.

Self-Image Self-Concept

Our sample of Catholic school children reported lower levels of self-image self-concept upon the transition to junior high that approached significance. Additionally, there was a grade cohort by ethnicity interaction that approached significance in our sample. Of the domains of self-concept, self-image is most highly correlated with global self-worth or self-esteem (Harter, 2006). Given the hierarchical structure of the SSCS, self-image self-concept also was highly correlated with general self-concept in our sample. However, gender differences were not significant, indicating that girls in our sample were not reporting lower scores than boys over time. Regarding the grade cohort by ethnicity interaction, it is likely that as students get older they feel the media pressure to look a certain way, as Harter (2006) argues. In our sample, this was most evident for Hispanic students, as they had the lowest self-image self-concept score at Time 2.

Despite declines in self-image over time, the importance that the students place on self-image also decreases slightly, but not significantly. Thus, as a group, they are not reporting lower levels of self-image self-concept or placing more importance on their image over time. From an intervention perspective, we would want to intervene for students who place high importance in an area and report low self-concept in that area. These results indicate that such an intervention would not be necessary for this group of students. It is possible that parents are helping students to understand that the images put forth by the media are not realistic, as Catholic school parents are known for their involvement (Bryk, Lee, & Holland, 1993; Frabutt, 2002).

Academic Self-Concept

Although not a significant change over time, our results also show that students' academic self-concept decreases in junior high, which is consistent with Marsh's (1989) and Tevendale and Dubois's (2006) research findings. There was a significant gender by grade cohort interaction, indicating that males in the fourth/sixth-grade cohort had higher average academic self-concept than males in the sixth/eighth-grade cohort. Because this finding was only for males and not the entire sample, it was unexpected and needs to be replicated before further speculation can be done. Also, it should be noted that all groups were reporting academic self-concept means within the average range (standard scores of 85-115). Thus, although there were significant differences for males in the two cohorts, the meaningfulness of these differences has less practical value, as all scores were within the average range.

The importance students place on their academics approached significance for a gender by grade interaction. Although no follow-up tests were conducted because this finding was not significant, it should be noted in the overall sample academic importance increased slightly for females, the fifth/seventh-grade cohort, Blacks, and Hispanics, and decreased for males, the fourth-sixth and sixth/eighth-grade cohorts, Whites, and Asians. Again, all scores were within the average range so the differences between groups may have less practical value.

Harter (2006) notes that researchers have hypothesized that in junior high there is "more emphasis on social comparison and competition, stricter grading standards, more teacher control, less personal attention from teachers, and disruptions in social networks" (p. 552). It is possible that significant change was not detected in self-concept in junior high because of the characteristics

of Catholic schools, mostly in school climate. McGrath (2002) said, "Consistent features of Catholic school climate include generally smaller enrollment, highly structured academic programs, devoted and loyal faculty.…Catholic schools attempt to promote complete intellectual, spiritual, athletic, and social development of their students" (p. 84). Catholic schools, in particular K-8 schools, may reduce the number of challenges students have to face upon entering junior high and help stabilize their self-concepts, academic self-concept in particular. For example, Harter (2006) indicates that students receive less personal attention in junior high, but at Catholic schools McGrath (2002) says that teachers are known for devotion and loyalty and have smaller enrollments; with fewer students, teachers have more time to give to the students. As Harter (2006) suggests, students are developmentally able to and tend to make social comparisons by junior high; however, McGrath (2002) notes that Catholic school teachers attempt to promote complete intellectual development of students. Bryk et al. (1993) also indicate that teachers at Catholic high schools are highly committed to their students' development in academics and other activities.

Social Self-Concept

Social self-concept remained stable between Time 1 and Time 2, declining slightly between Time 1 and Time 2 for the overall sample. Although there was a time by gender by ethnicity interaction for social importance, further follow-up tests yielded no significant results, indicating no meaningful significant differences across time for males and females and students of differing ethnicities. Harter (2006), as indicated above, said that students transitioning to junior high have "disruptions in social networks." Given the nature of a K-8 school there is little disruption to social networks; thus students may not feel less confident in their social relationships, as their friends are likely to remain the same over this transition. Additionally, Catholic schools also tend to promote the development of the whole child, which includes social development (Bryk et al., 1993; McGrath, 2002).

Conclusion

Self-concept, in general and in specific domains, remained stable across 2 years for students attending K-8 Catholic schools. Although Catholic school children do report decreases in their self-concept as they transition into junior high, these changes in self-concept are not statistically significant. Thus, expe-

riencing fewer changes, most notably not having a physical transition to a new building and not having social network disruptions, may help students at this time period.

Limitations

As with any study there are some limitations. Some unintended selection factors may have affected the study's outcome. Although most schools had a system for getting notes home to parents, such as sending a weekly envelope home with important notes, it is possible that some students had a greater desire to participate and consequently encouraged their parents to sign the consent form whereas other students may not have encouraged their parents to return the consent form. Additionally, students had to participate at both times of the study to be included in the sample for this study. Their experience at Time 1 may have influenced whether or not they wanted to participate at Time 2. Similarly, teachers and principals also appeared to influence their students' participation in the study, as return rates differed across schools, teachers, and time.

Another limitation of this study is that many of the schools had a high concentration of two ethnic groups. Ethnic group distribution across the schools was related to socioeconomic status (SES) in this study. There were also large discrepancies between the schools in the number of students who qualified for free and reduced lunch at Time 1 and the willingness of school principals to release this information to the researcher. It is possible that it may have been better to conduct the analyses using SES as the variable of interest, rather than ethnicity.

In this study students were asked to self-report their own behavior and feelings related to self-concept. Students' actual behavior was not measured, and no other reports of behavior, such as reports from teachers or parents, were obtained. Although most researchers would agree that self-report is the best way to assess self-concept, self-report measures have their drawbacks (Bosson, 2006).

Although other studies have found that there are significant self-concept changes upon entering junior high, this study showed no significant changes across time. There are a few possible explanations for these differences. One explanation is that this study did not have enough discrete data points to detect such differences since the measurements for both Time 1 and Time 2 were taken at the end of the school year. Another explanation is that the students

in this sample did not make a physical transition to junior high because the students attended Catholic schools that contained students from kindergarten through eighth grade. It is possible that by minimizing the physical transition to junior high the students' self-concept and the importance they placed on the domains of self-concept did not change.

Future Directions

Although this study used a scale based on the hierarchical model of self-concept, continued research on each of the models of self-concept is important. For example, the hierarchical model has the most empirical support, but it may oversimplify the self-concept construct because studies with many subjects tend to use the mean score for those subjects in the analysis. Thus, the results may overgeneralize that the population views self-concept hierarchically, whereas only part of the population may view it hierarchically. It is possible that different models may be in use at different times for different individuals (Harter, 2006).

Future studies may want to conduct a factor analysis on the SSCS to determine if the factor structures and different factor models are similar across grade cohort, gender, and ethnicity. It is possible that students in different grades or boys and girls or students of different ethnicity differentially endorse certain self-concept or importance items over others. For example, items related to looking others in the eye or making compromises with friends may be endorsed by students of one ethnicity and not students of another ethnic background.

As others have called for (Frabutt et al., 2008), more longitudinal studies of Catholic school children are needed. These studies need to examine not just the outcomes but the day-to-day functioning of Catholic school children while they are in school as well as their parents' and teachers' perceptions. Based on the results of this study, self-concept seems to decline less for students in a K-8 setting as compared to students who make a physical transition to a new junior high. A longitudinal study could examine the effects of the transition of Catholic school children to Catholic high school on self-concept since this is when the physical transition and social network changes happen for most Catholic school students.

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